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EXAMINER

LE, UYEN CHAU N

ART UNIT PAPER NUMBER

2876

DATE MAILED: 05/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/806,789

Applicant(s)

ANTEBI ET AL.

Examiner

Uyen-Chau N. Le

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 139-167, 188, 190-198, 203-205, 235-251, 262, 263, 265-278 and 280-299 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 139-167, 188, 190-198, 203-205, 235-251, 262, 263, 265-278 and 280-299 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4/15/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Prelim. Amdt/Amendment

1. Receipt is acknowledged of the Amendment filed 02 February 2005.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 190-198 are rejected under 35 U.S.C. 102(b) as being anticipated by Nerlikar (US 5,629,981).

Re claims 190-198: Nerlikar discloses a PCMCIA card, which serves as a smart card comprising a memory [308, 310]; an external communication link (e.g., antenna 306) for communicating information to or from the memory 308; and a biometric data acquisition circuit, for acquiring biometric data wherein the circuit shares an input transducer with the communication link 306 (figs. 3a and 3b; col. 7, lines 6-27).

4. Claims 268-270, 272 and 276 are rejected under 35 U.S.C. 102(b) as being anticipated by Pavlov (US 4,614,861).

Re claims 268-270, 272 and 276: Pavlov discloses a unitary self-contained card 10, which serves as a smart card comprising a memory (fig. 5; col. 10, lines 8-56); an input/output port 36, which serves as a communication link for transmitting or receiving information from the

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memory; a controllable pattern display having at least two states, a first state indicating that the smart card 10 is valid (e.g., displaying processing data), a second state indicating the smart card 10 is invalid, wherein the second state does not draw current (e.g., power down) (fig. 7; col. 11, line 50 through col. 12, line 28); wherein the smart card 10 locks in the second state (i.e., in the second state, the card is power down, and thus the card is locked from operation); a circuitry (fig. 16) for switching states of the pattern display to the second state (i.e., when a message is displayed on display 14 indicating the card is invalid, the switch 56 closes, which changing the card into the second state (e.g., power down)) (fig. 6; col. 11, lines 25+); the invalid-indicating pattern in the second state is perceptible by a human viewer (e.g., when a message is displayed on display 14 indicating the card is invalid before the power is down) (fig. 6; col. 11, lines 25+).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

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invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 139, 142-143, 145-150, 157-161 and 166-167 are rejected under 35 U.S.C. 102(b) as being anticipated by Carroll et al (US 5,517,194).

Re claims 139, 142-143, 145-150, 157-161 and 166-167: Carroll et al discloses a transponder 40, which serves as a smart card comprising: a memory 48 for storing information; at least one transmitting or receiving antenna 42, and a low frequency circuit 72 for handling information associated with the antenna 42 and the memory 48, which information is modulated at a modulation frequency of between 5 kHz and 100 kHz (e.g., 62.5 kHz) (see fig. 3; col. 13, lines 4+ and col. 15, lines 54-67); wherein the at least one antenna comprises a combined antenna for both reception and transmission (fig. 3); wherein the at least one antenna 42 comprises an array antenna (fig. 3); wherein the at least one antenna comprises an RF antenna (fig. 3; col. 12, lines 20+); a processor 10 for processing the information; wherein the processor 10 generates a response to an interrogation of the smart card 40 (col. 20, line 44 through col. 21, line 13); wherein the memory comprises a long-term memory, a temporary memory; wherein the modulation frequency is less than 80 kHz (e.g., 62.5 kHz); wherein the modulation frequency is over 17 kHz (e.g., 62.5 kHz); wherein the at least one antenna comprises a piezoelectric antenna (e.g., having RF+ terminal and RF- terminal, which transmitting power/voltage signals) (see fig. 3; col. 12, lines 1+); wherein the smart card 40 implements a two-way communication protocol (e.g., the transponder 40 transmits/receives data signals to/from the controller 10); wherein the protocol comprises an error correction protocol (e.g., to make changes) (col. 19, line 60 through col. 20, line 13).

8. Claims 139-141, 143-144, 162-165 and 283-295 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yokota et al (US 5,914,980) in view of Hartkon (US 3,961,323).

Re claims 139-141, 143-144, 162-165 and 283-295: Yokota et al discloses a wireless card 400, which serves as a smart card comprising: a memory 410 for storing information; at least one transmission antenna 404 and a reception antenna 401, and a low frequency circuit 405 for handling information associated with the antenna 401 and the memory, which information is modulated at a modulation frequency of between 5 kHz and 100 kHz (see fig. 1; col. 4, lines 25-47 and col. 11, lines 4+ and lines 41+); wherein the at least one antenna [401, 404] comprises an array antenna (figs. 6 & 7); wherein the at least one antenna comprises an acoustic antenna (e.g., performs radio communication) (col. 11, line 53 through col. 12, line 3); a high frequency circuit for modulating information at higher than 200kHz, 1 MHz (col. 9, lines 1-29 and col. 11, lines 23+); wherein the high frequency modulated information is transmitted/received using an RF circuit [404, 401].

Yokota et al is silent with respect to an acoustic carrier frequency.

Hartkon teaches a transmitter/tag 8 is modulated at an acoustic/audio carrier frequency of 2-20khz (fig. 1; col. 5, lines 1-43).

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate the acoustic/audio carrier frequency of Hartkon into the system as taught by Yokota et al in order to provide Yokota et al with a transponder system that which would require less power generation (i.e., less power consumption) due to the fact that less power generation within the transponder system would perverse and prevent the electronic

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components from going defective. Furthermore, such modification would have been an obvious engineering variation, well within the ordinary skill in the art, for the designer of the system to select the specific frequency ranges to meet his/her optimal functioning system.

9. Claims 139, 150-156 and 280-282 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gunnarsson (US 5,552,790) in view of Hartkon (US 3,961,323).

Re claims 139, 150-156 and 280-282: Gunnarsson discloses a transponder 5, which serves as a smart card comprising: a memory 8 for storing information; at least one transmitting or receiving antenna 6, and a low frequency circuit 9 for handling information associated with the antenna 6 and the memory 8, which information is modulated at a carrier frequency of between 5 kHz and 100 kHz (e.g., 32.8 kHz), which is less than 80 kHz, 60kHz, 50kHz, 40kHz (see fig. 1; col. 6, lines 16-26).

Gunnarsson is silent with respect to an acoustic carrier frequency.

Hartkon teaches a transmitter/tag 8 is modulated at an acoustic/audio carrier frequency of 2-20kHz (fig. 1; col. 5, lines 1-43).

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate the acoustic/audio carrier frequency of Hartkon into the system as taught by Gunnarsson in order to provide Gunnarsson with a transponder system that which would require less power generation (i.e., less power consumption) due to the fact that less power generation within the transponder system would preserve and prevent the electronic components from going defective. Furthermore, such modification would have been an obvious engineering variation, well within the ordinary skill in the art, for the designer of the system to select the specific frequency ranges to meet his/her optimal functioning system.

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10. Claims 188-189 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nitta (US 4,851,654) in view of Hartkon (US 3,961,323).

Re claims 188-189: Nitta discloses a IC/smart card comprising a memory 27; a speech input circuit (e.g., microphone 9) for entering information into the memory 27; an external communication link (e.g., antenna [29, 33]) for communicating information to or from the memory 27 (fig. 2; col. 2, line 15 through col. 3, line 34); wherein the communication link comprises an acoustic communication link and wherein the speech sounds are inputted using the acoustic link (col. 3, lines 8-34).

Nitta is silent with respect to an acoustic carrier frequency.

Hartkon teaches a transmitter/tag 8 is modulated at an acoustic/audio carrier frequency of 2-20khz (fig. 1; col. 5, lines 1-43).

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate the acoustic/audio carrier frequency of Hartkon into the system as taught by Nitta in order to provide Nitta with a transponder system that which would require less power generation (i.e., less power consumption) due to the fact that less power generation within the transponder system would preserve and prevent the electronic components from going defective. Furthermore, such modification would have been an obvious engineering variation, well within the ordinary skill in the art, for the designer of the system to select the specific frequency ranges to meet his/her optimal functioning system.

11. Claims 203 and 205 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nerlikar in view of Mainguet (US 6,289,114). The teachings of Nerlikar have been discussed above.

Re claims 203 and 205, Nerlikar discloses a PC card, which serves as a smart card comprising a memory [308, 310]; an external communication link (e.g., antenna 306) for transmitting information from the card responsive to information in the memory (fig. 3A; col. 7, lines 7-27); an optional analog pressure detector (col. 4, lines 40+).

Nerlikar fails to teach or fairly suggest an array of pressure detectors for determining spatial positions of pressure changes on the array, wherein the array detectors comprises an array of individual electrified piezoelectric elements.

Mainguet teaches a matrix array of pressure sensors/detectors for detecting pressure of a finger pressing on a sensor 10 (fig. 2; col. 4, lines 36-52), wherein the array detectors comprise an array of individual electrified piezoelectric elements (col. 4, lines 4-52).

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate the pressure sensors/detectors of Mainguet into the system as taught by Nerlikar in order to provide Nerlikar with a time consumption system which displays an instant image of fingerprint patterns of the finger pressing on the sensor due to electric signals produced by measuring variation of charges generated in the different piezoelectric elements of the matrix array.

12. Claim 204 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nerlikar as modified by Mainguet as applied to claim 203 above, and further in view of Bauerschmidt (US 6,014,083). The teachings of Nerlikar as modified by Mainguet have been discussed above.

Re claim 204, Nerlikar/Mainguet have been discussed above but fail to teach or fairly suggest that the array detectors comprise a surface acoustic wave (SAW) detector.

Bauerschmidt teaches a SAW sensor for detection of pressure waves (col. 1, lines 32-35; col. 4, lines 27-30 and col. 5, lines 45-48).

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate a SAW sensor for detecting of pressure waves as taught by Bauerschmidt into the system of Nerlikar/Mainguet in order to provide Nerlikar/Mainguet a capability of measuring of any types of pressure that applied to the card. Furthermore, such modification would provide Nerlikar/Mainguet with a compact system because SAW sensors are particularly small which occupy less space, and therefore an obvious expedient.

13. Claims 235-242 and 296-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yokoyama et al (US 4,942,534) in view of Nikolich (US 5,986,562).

Re claims 235-242 and 296-299: Yokoyama et al discloses a smart card 100 comprising a first separable part 112 including at least a memory 131 (figs. 2A and 3); a second separable part 111 comprising at least a holding element for holding the first part 112 (figs. 2B and 2B) and an electronic circuit associated with an operation of the first part 112 (fig. 3); wherein the electronic circuit comprises a power source, which is a battery 117 (fig. 2B; col. 4, lines 24-44); wherein the electronic circuit comprises a receiver 116 for transmitted power (col. 4, lines 24-44); wherein the electronic circuit comprises an amplifier (figs. 2B-4; col. 5, lines 18-42); wherein the electronic circuit comprises an antenna [118, 119]; wherein the first part 112 is an independently operable smart card (i.e., the IC card 112 includes CPU, EEPROM, ROM, RAM, input port, output port, etc.; thus the IC card 112 can be used independently in a contact manner); wherein the first part 112 requires the electrical circuit (i.e., of the second part 111) to operate in a contactless manner.

Yokoyama et al is silent with respect to the second part/holding means is flexible.

Nikolich teaches a tag holder 10 having a housing 12, which is formed from a polymeric material (e.g., plastic or rubber) (figs. 1-3; col. 2, lines 15-22).

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate the plastic tag holder of Nikolich into the system as taught by Yokoyama et al in order to provide Yokoyama with an easily molded and be comfortable to a tag/badge wearer, thus providing a more user friendly system.

14. Claims 243, 245-249 and 251 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moon et al (US 6,211,858) in view of Prasad et al (US 6,237,026) and Nagata et al (US 4,677,657).

Re claims 243, 245-249 and 251: Moon et al discloses a portable intelligent device 10, which serves as a smart card comprising a speaker 22 (fig. 1); a communication link suitable for communication with a computer (lines 44+ and 60+); a circuitry for presenting information from the communication link over the speaker 22 as speech (col. 3, lines 40+); a telephone handset circuitry 20 (fig. 1), thus the link is an acoustic link; the speaker forms a part of the acoustic link (fig. 1); acoustic help-file viewing circuitry (fig. 3); wherein the acoustic link is operative to use office equipment as a base station from receiving the information, wherein the office equipment comprises telephone and wherein the card communicates using a speaker of the telephone and the speaker 22 of the smart card 10 (i.e., the smart card/ portable intelligent device 10 includes a telephone land-line connector (fig. 1; col. 3, lines 47+) and a telephone handset 20 having a speaker 22, and thus portable intelligent device 10 can be used as a conventional telephone. It

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would have been obvious that portable intelligent device 10 is operable to communicate with any conventional telephone having a speaker, including office telephone/equipment).

Moon et al fails to teach or fairly suggest that the communication link is a medium range of over 0.5 meters.

Prasad et al teaches a network system using a medium range communication link having a range up to 600 feet (col. 3, lines 35-45).

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate the teachings of Prasad et al into the system as taught by Moon et al because such modification would have been an obvious engineering variation, well within the ordinary skill in the art, for an advanced system that allows users to access the system from as far as 600 feet away from the base station, and thus serving more people and preventing the base station from being overly crowded.

Moon et al as modified by Prasad et al fails to teach or suggest that the smart card comprising a flat card having a thickness about the thickness of a credit card.

Nagata et al teaches a card 1 having a thickness same as bank card or credit card and comprising a power source 11, a display 12, a keypad 13, a microphone 14, a speaker 15 and an antenna 16 (fig. 1; col. 3, line 36 through col. 4, line 14).

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate credit card size card of Nagata et al into the system as taught by Moon et al/Prasad et al in order to provide Moon et al/Prasad et al more compact system which can be conveniently carried within a pocket/purse, and thus providing a more user friendly system.

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15. Claims 244 and 250 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moon et al as modified by Prasad et al as applied to claim 243 above, and further in view of Weatherill (US 5,881,149). The teachings of Moon et al as modified by Prasad et al have been discussed above.

Re claims 244 and 250: Moon et al/Prasad et al have been discussed above but fail to teach or fairly suggest that the smart card comprising a pager circuitry, the office equipment comprises computers with sound system designed for music.

Weatherill teaches a communication device 102, which serves as a smart card can be used as a pager (col. 3, lines 60+ and col. 7, lines 47+); a computer (fig. 16) with sound system designed for music (col. 3, lines 30-38 and col. 17, lines 8+).

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate the teachings of Weatherill into the system as taught by Moon et al/Prasad et al in order to provide Moon et al/Prasad et al with a universal system wherein the communication device can be used as a pager, a mobile telephone, a personal digital assistance, etc., and thus the user does not have to carry multiple devices and does not have to concern about forgetting one or another before leaving the house/office/etc. Furthermore, such modification would provide the user with an entertainment system (i.e., operable to play music).

16. Claims 262-263 and 267 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pitroda (US 5,884,271) in view of Iwamatsu (JP 01226091).

Re claims 262-263 and 267: Pitroda discloses a universal electronic transaction (UET) card, which serves as a smart card comprising a communication link (e.g., CIU) with a computer (col. 10, lines 4+); an authentication circuit for authenticating a transaction (col. 14, lines 40+); a

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display that displays pertinent information regarding the transaction for visual verification by the customer (fig. 16; col. 14, lines 45-50); a memory for storing a record of acceptance of the transaction by a user of the smart card UET (figs. 3 and 18; col. 11, lines 30-47 and col. 14, lines 61-67).

Pitroda is silent with respect to an acoustic display.

Iwamatsu teaches a system and method for utilizing an acoustic display 4 (figs. 1-2; English abstract).

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate the acoustic display of Iwamatsu into the system as taught by Pitroda in order to provide user with flexibility to review information in various forms (e.g., text, graphic images, visual images, audio, video, etc.), and moreover providing a more user friendly system for a visually impaired individual as well.

17. Claims 264-266 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pitroda as modified by Iwamatsu as applied to claim 262 above, and further in view of Blinn et al (US 6,058,373). The teachings of Pitroda as modified by Iwamatsu have been discussed above.

Re claims 264-266: Pitroda/Iwamatsu have been discussed above but fail to teach or fairly suggest that the display comprises an acoustic display; the pertinent information comprises an identification of a vendor with whom the transaction being made; the pertinent information comprises an identification of goods being the subject of the transaction.

Blinn et al teaches a display comprises an acoustic display for displaying audio, video information, etc. (col. 9, lines 55-60); wherein the information comprises an identification of a

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vendor (e.g., Adventure Works) and an identification of goods being purchased (e.g., AW06-029-00, which is sahara) (figs. 4-6).

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate the teachings of the teachings of Blinn et al into the system as taught by Pitroda/Iwamatsu in order to provide user with the ability to view details product and its price that he/she is about to purchase and the total amount of his/her order before authorizing a transaction, preventing overpaying or purchasing unwanted products.

18. Claims 271 and 273-275 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pavlov in view of Kelsey (US 5,907,142). The teachings of Pavlov have been discussed above.

Re claims 271 and 273-275: Pavlov has been discussed above and further discloses a circuitry (fig. 6) for receiving a command over the link to switch states (e.g., on/off switch [54/56] (figs. 1 and 4)); wherein the command is verified using encryption (col. 7, lines 1-33 and col. 13, lines 11-17).

Pavlov fails to teach or fairly suggest that the pattern display changes to the second state over time unless otherwise activated; the circuitry comprises a delay circuit for delaying the changing for a period of time.

Kelsey teaches a microprocessor 24 includes an optional timer, which serves as a delay circuit, which automatically deactivates the transaction card 12 after a specific period of time (col. 5, lines 17+).

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate the teachings of Kelsey into the system as taught by Pavlov in order to provide Pavlov with a more secure system wherein the card is prevented from being

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accessed by an unauthorized personnel in the event the cardholder forgets to deactivate the card (i.e., leaving the card in an activated mode/state), and thus the user does not have to concern about fraudulent use of the card in the event of lost/stolen.

19. Claim 277 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gunnarsson in view of Rodal et al (US 5,467,095). The teachings of Gunnarsson have been discussed above.

Re claim 277: Gunnarsson have been discussed above but fail to teach or fairly suggest that the antenna radiates or receives far field radiation.

Rodal et al teaches the antenna 14 radiates or receives far field radiation (col. 6, lines 1-5).

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate the teachings of Rodal et al into the system as taught by Gunnarsson in order to provide Gunnarsson with capability of interrogation in a broader range (e.g., larger area), and thus providing a more feasible system wherein the number of interrogators required in a certain area is reduced.

20. Claim 278 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gunnarsson in view of Cole et al (US 5,523,749). The teachings of Gunnarsson have been discussed above.

Re claim 278: Gunnarsson have been discussed above but fail to teach or fairly suggest that the card transmits information without a carrier wave.

Cole et al teaches a code generation circuit of a label/card transmits a reply signal to a receiver antenna without carrier wave (col. 1, line 56-59).

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate the teachings of Cole et al into the system as taught by

Gunnarsson in order to preserve the electronic components of the system, and thus prevents the electronic components from going defective. Furthermore, such modification would provide Gunnarsson with a capability of controlling the radiated signal for secure purpose, and therefore an obvious expedient.

Response to Arguments

21. Applicant's arguments with respect to claims 139-167, 188, 190-198, 203-205, 235-251 and 262-267 have been considered but are moot in view of the new ground(s) of rejection.

Newly cited references to Hartkon, Nikolich, Nagata et al and Iwamatsu have been used in the new ground rejection to further meet the newly added limitation of the claimed invention (i.e., claims 139, 235, 243 and 262).

22. In response to the Applicant's argument to "...the Examiner has not shown a smart having a biometric data acquisition circuit, sharing an input transducer with a communicating link" (p. 16, 3rd paragraph), the examiner respectfully requests the Applicant to further review Nerlikar in which a PCMCIA card, which serves as a smart card comprising a memory [308, 310] having a biometric data acquisition circuit, for acquiring biometric data (i.e., digital voice signature) wherein the circuit shares an input transducer with the communication link 306 (figs. 3a and 3b; col. 7, lines 6-27). Accordingly, the claimed limitation, given the broadest reasonable interpretation, Nerlikar meets the claimed invention (see the rejection above).

23. In response to the Applicant's argument to "...Mainguet teaches away from being placed on a smart card ..." (p. 16, lines 20-24), the examiner respectfully requests the Applicant to further review the primary reference to Nerlikar, in which a PC card, which serves as a smart

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card comprising a memory [308, 310]; an external communication link (e.g., antenna 306) for transmitting information from the card responsive to information in the memory (fig. 3A; col. 7, lines 7-27); an optional analog pressure detector/sensor for detecting a user finger as the user touching the sensor/card (col. 4, lines 40+). However, Nerlikar is silent with respect to the pressure sensor/detector is an array of pressure detectors. The secondary reference to Mainguet teaches a matrix array of pressure sensors/detectors for detecting pressure of a finger pressing on a sensor 10 (fig. 2; col. 4, lines 36-52). Accordingly, the claimed limitation, given the broadest reasonable interpretation, Nerlikar in view of Mainguet meets the claimed invention (see the rejection above).

24. In response to the Applicant's argument to "...the Examiner did not show a controllable pattern display having at least two states, a first state indicating that the smart card is valid and a second state indicating the smart card is invalid" (p. 17, last paragraph), the examiner respectfully requests the Applicant to further review Pavlov in which a controllable pattern display having at least two states, a first state indicating that the smart card 10 is valid (e.g., displaying processing data), a second state indicating the smart card 10 is invalid, wherein the second state does not draw current (e.g., power down) (fig. 7; col. 11, line 50 through col. 12, line 28). Accordingly, the claimed limitation, given the broadest reasonable interpretation, Pavlov meets the claimed invention (see the rejection above).

Conclusion

25. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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The patents to Nara et al (US 4766294 A); Nara et al (US 4814591 A); Tanaka (US 4924075 A); Nara (US 5072103 A); Martin (US 6060332 A); Kuriyama (US 6125452 A); Martin (US 6272228 B1); Amadeo (US 6628240 B2); Kikinis et al (US 5522089 A); Nagata et al (US 4677657 A); Sonoyama et al (US 5539819 A); Wallerstein (US 5955961 A) are cited as of interest and illustrate to a similar structure of a card for interaction with a computer.

26. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Uyen-Chau N. Le whose telephone number is 571-272-2397. The examiner can normally be reached on Mon, Wed. and Fri. 5:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MICHAEL G LEE can be reached on 571-272-2398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Vylen-Chau N. Le
May 18, 2005



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